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Exploring the Impact of Legalization of Recreational Marijuana on Adolescent Drug Use

by

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A Capstone Project Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Criminal Justice

Department of Criminal Justice

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Capstone Overview

For years, punitive laws reflected the idea that marijuana was a dangerous drug that the government should strictly prohibit. In recent years, however, the social and political stance against marijuana has softened given the number of states that have decriminalized or legalized marijuana. This capstone explores the various ways in which recreational marijuana legalization is affecting states across the country. The first chapter discusses the history of marijuana in the United States and how this drug came to be criminalized. The second chapter discusses some of the effects of the criminalization of marijuana and the impact that this has had on minority communities. The third chapter discusses moves towards decriminalization and legalization in recent years and how opinions regarding marijuana have changed over time, as well as possible explanations to these shifts in opinion. The final chapter uses data collected from the Centers for Disease and Control Prevention's Youth Risk Behavior Survey to discover how recreational marijuana legalization has impacted adolescent marijuana use in states that have and have not legalized recreational marijuana.

The War on Marijuana

Abstract

This paper provides an overview of the history of America's war against drugs and the impact that this figurative war has had on American society. It is clear that the war on drugs has disproportionately harmed racial/ethnic minorities. Punitive policies currently in place have diverted resources away from the social and economic growth of these communities. This is why there is a movement towards working to reform drug laws in order to address the country's drug crisis. The final section includes recommendations that can improve our current response against marijuana.

Introduction

      Marijuana policies have resulted in the disproportionate incarceration of minorities. In the 1970s, the government created initiatives aimed at quelling the illegal use, distribution, and trade of drugs and ultimately was referred to as the "War on Drugs". With the creation of this movement, authorities felt that creating and enforcing harsh penalties for offenders was of utmost importance in order to suppress the drug epidemic. One of the solutions that government officials found for dealing with the drug problem during the 1970s, and one that continues to be implemented today is incarceration for drug crimes. The initiatives that have come from this campaign against drugs, particularly marijuana, have been met with scrutiny and criticism from the public, since this system of incarceration seems to target minorities (Human Rights Watch, 2020).

History

      Throughout the history of the United States, there has been an inconsistent response to marijuana. Before the 1900s, domestic production of hemp was encouraged in the United States. Congress defines hemp as "the plant Cannabis sativa L, and any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9 tetrahydrocannabinol (THC) concentration of not more than 0.3 percent on a dry weight basis" (Congressional Research Service, 2021, p. 3). Hemp differs from marijuana because these plants contain 0.3 percent or less THC, which is marijuana's main psychoactive substance. Because of this, hemp does not have an intoxicating potential. In the 17th century, hemp was approved by the government for the production of various necessities during the time, such as rope, sails, and even clothing. This product was such a necessity that Virginia passed legislation that not only allowed farmers to produce hemp, but it

was actually a requirement by the state; it was even "allowed to be exchanged as legal tender in Pennsylvania, Virginia, and Maryland" (Marijuana Timeline, 2021). From the 1600-1890s, hemp was widely used and accepted, and the late 19th century even experienced a rise in the use of marijuana for medicinal purposes and was a commonplace product sold at pharmacies. In 1906 there was more of an effort to contain the distribution of cannabis, and the Pure Food and Drug Act required that remedies containing cannabis receive an appropriate label. From 1900-1920s a shift in the use of marijuana was observed; the Mexican Revolution of 1910 had ended, leading to the migration of Mexicans into the United States. These Mexican immigrants were "war refugees and political exiles who fled to the United States to escape the violence" (The John W. Kluge Center at the Library of Congress, 2015). Mexican immigrants were also in search of stability and employment. These immigrants introduced the recreational use of marijuana to American culture, and from this moment on the drug was not seen in the same light; this drug came to be associated with immigrants, and "the fear and prejudice about the Spanish-speaking newcomers became associated with marijuana" (Marijuana Timeline, 2021).

From this point forward anti-drug campaigns took hold in communities all over the country and not only was the drug associated with criminal actions, but with immigrants as well. This fear of marijuana continued into the 1930s and spurred resentment towards Mexican immigrants, so much so that research during the time linked the drug to violence, crime, deviant behavior, and even being "racially inferior" (Marijuana Timeline, 2021) if you used the drug. The campaign against marijuana was so successful, that by 1931, the drug had been outlawed in 29 states. The 1930s saw the creation of the Federal Bureau of Narcotics (FBN), Uniform State Narcotic Act, the banning of narcotics in films, and the Marijuana Tax Act, which criminalized marijuana and limited possession of the drug to individuals who could pay an excise tax for

medicinal and industrial uses. In the 1940s, ideas about marijuana once again began to change and the New York Academy of Medicine declared that previous research on marijuana and its effects on crime, violence, and addiction were unfounded. During World War II, the usage of hemp was necessary once again for military equipment and the "Hemp for Victory" campaign was launched by the U.S. Department of Agriculture, which encouraged farmers to stay home and grow hemp for the war effort. The 1950s experienced stricter sentencing laws and during this time the Boggs Act and Narcotics Control Act heavily penalized marijuana related offenses and set mandatory sentences; "a first-offense marijuana possession carried a minimum sentence of two to ten years with a fine of up to $20,000" (Marijuana Timeline, 2021). The 1950s also placed an emphasis back on Mexico and its influence in the United States. During this time youth were crossing over to Mexico to obtain marijuana and this led to a moral outcry over the usage of narcotics. "To establish the link between drug use and Mexico, newspapers used three approaches – sensationalist news stories, investigative reports, and campaigning editorials" (Smith & Pansters, 2020, p. 369). Actions taken during this time by the Mexican government still resonate in current drug policy.

By the 1960s, attitudes toward marijuana became more lenient and usage of the drug became commonplace for upper middle class white citizens. President Kennedy and Johnson accepted that marijuana did not lead to problematic behaviors as previously thought, and policies towards the drug began to consider not only criminal penalties, but also treatment. Towards the end of the 1960s the Bureau of Narcotics and Dangerous Drugs was created. The 1970s created the most drastic changes and during this time mandatory minimum sentences imposed in the 50s were repealed, as well as mandatory federal sentences for possessing small amounts of the drug. The Controlled Substances Act of 1970 was established in order to "improve the manufacturing,

importation and exportation, distribution, and dispensing of controlled substances" (Gabay, 2013). This act established rankings or schedules in order to categorize drugs by their perceived danger to the public and their addictive power. Marijuana was labeled as a Schedule I drug while President Nixon waited for a final report to be developed by the Shafer Commission, or officially known as the National Commission on Marihuana and Drug Abuse. The commission determined that "marijuana should not be in Schedule I and even doubted its designation as an illicit substance" (Burnett & Reiman, 2014). The commission went so far as to state that marijuana possession should be decriminalized. President Nixon ignored these recommendations and his stance on marijuana remained unchanged. The executive actions by President Nixon remain in effect to this day and marijuana is still categorized by the federal government as a Schedule I drug, which by definition is a drug that has a "high abuse potential with no accepted medical use; medications within this schedule may not be prescribed, dispensed, or administered" (Gabay, 2013). Drugs under this classification are strictly regulated by federal standards. The National Organization for the Reform of Marijuana Laws (NORML) was also founded during this time. The 1970s also saw the decriminalization of marijuana in eleven states and reduced penalties for marijuana in others, but the most drastic initiative – the war on drugs – also began in earnest during this time.

The War on Drugs

The war on drugs took hold in the 1970s and was largely influenced by the prohibition policies instituted during Woodrow Wilson's presidency. In June 1971, Nixon declared that drug abuse was the number one enemy to the public and officially commenced what we now know as the "war on drugs". This initiative was propelled by Nixon since he "argued that the moral danger from drug use—and marijuana use, particularly—extended far beyond the contribution to

crime, addiction, and whatever physical or psychological harms it might cause to individuals"
(Siff, 2018, p. 181). Nixon also created the Drug Enforcement Administration (DEA) in 1973 in
order to target the illegal use and smuggling of drugs. Many argue that Nixon had ulterior
motives behind this initiative, such as being able to maintain his job as President by targeting
those who opposed his presidency and were antiwar. There was also a question of whether
racism played a role in pushing for this initiative since society tended to associate certain drugs
with minorities and by criminalizing drugs, these communities could be disrupted. Although
there are questions about ulterior motives behind this initiative it is clear that it wasn't very
influential since "an estimated 3.7 million Americans smoked marijuana for the first time in
1973, compared with 2.7 million new users in 1969" (Siff, 2018, p. 223). The campaign was also
not effective with youth, and many found the campaign to be noncredible.

This emphasis on using harsh punishment policies in order to control the usage of drugs
is a legacy that remains with us to the present day. Much of the emphasis on controlling drugs
has been aimed against marijuana. It has been characterized as a gateway drug, despite no clear
evidence to this claim. It has been found that "every year, arrests for marijuana, primarily for
possession, have exceeded arrests for all violent crimes combined" (Criminal Justice Policy
Foundation, 2019). This is a troubling statistic that has led to millions of arrests each year, many
times for simple possession. It has been found that "the majority of drug arrests in the United
States involve either marijuana possession or marijuana distribution (52% in 2010), and
marijuana distribution arrests make up 33% of all arrests for drug distribution" (Mitchell &
Caudy, 2017, p. 109). Although many states have made changes to the punitive policies
surrounding drugs, such as legalizing marijuana usage for recreational purposes in some states
and allowing the usage of it for medical purposes, Congress has yet to change the federal law

that prohibits the use of marijuana. As of 2019 legislation to legalize marijuana has been introduced in the House and the Senate.

Greater attention has been paid to other types of drugs given the recent problems with opioid addiction. The way in which this epidemic has been handled continues to rely on ineffective strategies, namely the use of mandatory sentences. Research from the Criminal Justice Policy Foundation has found that public health measures implemented with the purpose of providing rehabilitation or drug knowledge programs have been more successful at curtailing the number of users of certain drugs. The Criminal Justice Policy Foundation has also found that states that regulate marijuana markets do not see an increase in the number of young people using this drug, giving way for more policies to be proposed and potentially accepted by Congress.

Racial Disparities

An inadvertent consequence of the war on drugs has been the disparate impact the get-tough policies have had on racial minorities. Research by the Sentencing Project organization has found that minorities are arrested for drug-related crimes at a higher rate than for actual drug usage; "an ACLU report found that blacks were 3.7 times more likely to be arrested for marijuana possession than whites in 2010" (Ghandnoosh & Ghandnoosh, 2016, p. 15). More specifically, this is important considering that the rate difference in marijuana usage between blacks and whites is not significant. It has also been found that neighborhood conditions are important determinants when it comes to racial differences in drug arrests. It has been observed that "blacks are apprehended more frequently for marijuana and cocaine offenses" (Donnelly, Wagner, Anderson, & O'Connell, 2019, p. 9). This demonstrates how law enforcement might deliberately target neighborhoods that are predominantly non-white. While black offenders are

not afforded arrest leniency regarding type of drug possession, it has been observed that white offenders are more likely to be arrested for more serious drug usage such as cocaine, most likely because of overdose service calls. This demonstrates a potential imbalance in our justice system, as not all members of society benefit from the use of police discretion.

National data on youth drug offenders has shown that minorities have larger rates of offending simply because they have greater involvement in drug offending. Although this is the case for marijuana usage since "African Americans and Hispanics have shown a considerably greater increase in marijuana use than Whites, at least until 2014 when Hispanics' use began to decline in both grades 8 and 10; this decline continued for several years" (Johnston, Miech, O'Malley, Bachman, Schulenberg & Patrick, 2020, p. 50), this is not the case for any other type of illicit drug usage. It has been found that "in the last few years, both African American and Hispanic students in the upper grades (high school grade levels) have attained similar rates of use to Whites of any illicit drug" (Johnston et al., 2020, p. 50). Mitchell & Caudy (2017, p. 92) observed that "minorities are more likely to sell drugs to strangers, in public places, or in areas with heavy police presence", which elevates the risk of being arrested. Although one could point to racial biases within the system as the sole cause of disparities in drug arrest rates, it would be unwise to do so, since there are many other factors at play. Minorities often reside in neighborhoods where there are reduced economic opportunities and this may lead to a desperate need to become involved in criminal activities. There is also the fact that many drug markets are concentrated in inner-city neighborhoods that have a larger minority population. It is clear why these neighborhoods are of special interest to law enforcement due to the nature and scope of drug distribution and usage.

Consequences

It is clear that the war on drugs has had significant consequences for society. Interestingly, "while some states have decriminalized possession of small amounts of marijuana, other states still make marijuana possession a misdemeanor or even a felony" (Every 25 Seconds, 2019, p. 4). This is extremely problematic since many offenders can be charged with a felony for a drug crime that does not reach the level of seriousness as other crimes, such as violent crimes. Additionally, Jensen et al. (2019), found that the early years of the war on drugs caused an increase in prison construction and this led to a drain on resources earmarked for educational and health programs. It has also been observed that the early years of the current U.S. war on drugs (1986-2004) had a significant impact on economically disadvantaged communities. Overall, disadvantaged communities are being affected by punitive approaches utilized by law enforcement, even though these methods are not getting to the root of the problem.

State and federal authorities were focused on utilizing a law-and-order approach, but were not seeing this issue as a public health problem. There were many members of society who had become addicted to drugs, which led to an increase in the numbers of people contracting HIV and deaths related to drug use (Jensen et al., 2019). During this time, record number of convictions increasingly disenfranchised ethnic and minority communities by reducing the number of potential voters advocating for their communities in election cycles. This in turn perpetuated the cycle of keeping the poor and disenfranchised in a disadvantaged position in society. Although there were efforts to adress these problems during this time, there weren't many positive outcomes since there was a reluctance to move away from treating drug related crimes with a punitive law and order approach.

Marijuana Policy Reform

Since 2004, some problems caused by the war on drugs have been addressed. One of the most significant changes has been the movement towards the decriminalization of marijuana usage. This new movement aims to reduce or completely eliminate the legal, economic, and social harms that come from marijuana related crimes. Currently, "22 states and the District of Columbia have removed criminal sanctions for possession of small amounts of marijuana for personal consumption by either decriminalization or legalization" (Jensen et al., 2019). This move has led to a reduction in the amount of people who are incarcerated for minor offenses, such as possessing small amounts of marijuana for medical or recreational use. In 2016, sixteen states including New York, Pennsylvania, Ohio, Michigan, Florida, Arkansas, and others voted to allow medical marijuana, which has been beneficial for persons who suffer from health-related issues that marijuana can alleviate.

There has also been a movement towards legalizing recreational marijuana, and states like California, Nevada, and Maine among others have voted to make the recreational use of marijuana legal. Although there are fewer states where marijuana can be used in a recreational manner, it is a move towards creating tax revenue for states that are also used to fund programs that address substance abuse and other social programs. This movement also reduces the number of people imprisoned for minor marijuana offenses and, to some extent, reduces racial disparities produced by the legal system. Jensen et al. (2019), found that in Washington state the average annual cannabis court filings decreased to 120 in 2013 a stark contrast from the 6,779 misdemeanor filings in the past four years. Colorado also witnessed a similar decline in court filings related to marijuana offenses, but there wasn't much change in both states related to the racial disparity problem as minorities continued to be more severely punished for marijuana

charges. While there have been significant changes implemented at a state level, the future legal status of medical and recreational cannabis is still unclear at the federal level.

Although there have been efforts to legalize medical and recreational marijuana, issues with policies regulating other drugs exist. Since 2000, many states have moved towards changing their draconian drug policies. There has been a realization by many states that drug treatment might be a more effective approach and that there needs to be a reduction of costs associated with resources devoted to punishing drug offenders. Jensen et al. (2019) reported that states like Michigan have repealed mandatory minimum penalties for drug offenses. New York Followed Michigan in 2009, and also went further by permitting judges to recommend treatment programs focusing on addiction as an alternative to punitive sentencing. This was a stark contrast from New York's 1973 Rockefeller Drug Laws that were extremely harsh in nature. California also implemented Proposition 36 in 2000, which allowed non-violent drug offenders to have the option of undergoing drug treatment for violations of parole or probation. Other states such as Georgia, Hawaii, Kentucky, Utah, etc. have also moved away from punitive measures for drug offenders as well.

While these improvements are a step in the right direction, there are still many problems with drug related policies. Some states have retained their lengthy sentences for drug offenses, however. The state of Texas follows this punitive approach with "78% of these individuals sentenced for possessing less than one gram of an illegal substance" (Jensen et al., 2019). These punitive measures have led to an increase in Texas' prison population with more than 16,000 people being sentenced in 2015 for drug possession. Florida has also implemented stiff measures that can lead to a five-year prison sentence for simply possessing certain drugs. Louisiana is the state with the most shocking numbers given their distinction as the state with the highest rate of

incarceration in the country. Jensen et al. (2019) found that almost 18,000 people are arrested each year for drug related offenses, many of the times for possessing small quantities. Heroin possession can also lead to a minimum of four years in prison, ten years being the maximum, and most other drugs can lead to a five-year prison sentence. These are alarming numbers, especially considering the racial disparities that exist within our system, and how these sentences have a racial aspect to them in many cases.

Current U.S. drug laws have impacted communities of color, as the racial disparity in incarceration rates is undeniable. Jensen et al. (2019) noted that until 2010 there existed disparity in sentencing regarding offenses for crack and powder cocaine, but this changed with the "Fair Sentencing Act". This move on behalf of the U.S. Sentencing Commission greatly benefitted the more than 12,000 black offenders who could have their sentences reduced. These measures have not proven to be enough though, since black people are still being arrested and charged for marijuana possession at higher rates than white people, despite having similar rates of marijuana usage.

Recommendations

The traditional approach employed to curb drug use and distribution have detrimental effects, especially for minorities. As such, alternative approaches such as the creation of drug courts have been developed in response. The drug court model focuses on integrating drug treatment with community supervision. Researchers have come to praise drug courts and have found that these courts work better for offenders who have a higher chance/risk for recidivism (Koetzle, Listwan, Guastaferro, & Kobus, 2015). These drug courts have started to be employed by many states and counties as a step in the right direction since probation agencies are not fully equipped to handle the number of caseloads and do not have the full capacity to deal with each

client's needs. Although drug courts have yet to have wide acceptance and usage, it can definitely be considered as a viable alternative method than the traditional punitive measures that have been employed over the past 50 years.

There has also been much focus on decriminalizing and legalizing drugs like marijuana. Many states have already taken this route in order to mitigate the effects of the war on drugs. Additionally, many countries around the world have adopted this approach and have also invested in treatment and other services for offenders instead of a punitive response. Within this country there has been an unrelenting desire to curb the illegal use, distribution, and trade of drugs, but the measures taken to accomplish this have had detrimental consequences. Incarceration for drug crimes and biased law enforcement practices have led to an increase in prison populations and have had disproportionate effects on racial minorities. Resources spent on these punitive measures have also taken away from the development of communities, both social and economic. This is why many argue that drug crimes should not be dealt with in a punitive manner; instead, we should focus on rehabilitation measures and alternatives to arrest that would focus on the root of the drug problem in this country. In the end, it is clear that the war on drugs has failed, therefore, efforts should be focused on more humane, and possibly effective methods that will address problems associated with drugs and bring about change within our communities.

Conclusion

The war on drugs has created punitive policies that have caused more turmoil than good in our communities. This is especially clear when analyzing the racial disparities that exist in our criminal justice system for drug-related offenses. The history of the war on drugs and the response to drug usage has been inconsistent over time. Although some initiatives like

decriminalization and legalization are being implemented to help mitigate the effects of the war on drugs, these initiatives are not doing enough to have a lasting impact. Resources spent on punitive measures have taken away from the social and economic development of communities. This is why drug crimes should not be dealt with in a punitive manner; instead, we should focus on changing drug policies in order to address drug problems in a more humane way. We should examine the effects that the legalization of marijuana has had in certain states, evaluating the pros and cons of legalization. This will undoubtedly help states that are considering changing their marijuana policies gain some insight on how legalization has impacted other states. As a country, it is important that we evaluate the challenges, and potential benefits that come from legalizing certain drugs like marijuana in order to consider how these policy changes can potentially benefit our communities.

Examining Racial Disparities in Drug-Related Offending

Abstract

A variety of factors play a role in the disproportionate representation of minorities in drug-related arrests. Criminological theories of crime, such as General Strain Theory and Social Disorganization are particularly adept at providing an explanatory framework that can account for the racial differences in the distribution of drug arrests. Rather than relying on stiff sanctions to scare people into conformity, the criminal justice system should concentrate on the underlying issues that may lead to involvement with drugs.

Introduction

For many years, the government has attempted to quell the illegal use, distribution, and trade of drugs. This "War on Drugs" has had a devastating impact, particularly on the minority community as "black Americans are nearly six times more likely to be incarcerated for drug-related offenses than their white counterparts, despite similar substance usage rates" (Pearl, 2018). These arrest statistics not only include those who have been arrested for possessing drugs for personal use, but it also includes those who have been arrested for distributing drugs as well. According to the Substance Abuse and Mental Health Services Administration (2019), the prevalence of (any) illicit drug use varies slightly between racial groups -- African Americans (13.7%), Caucasians (12%), and Hispanics (9.7%). For marijuana in particular, SAMHSA reports that African American (12.2%) use was slightly higher than that of the general population (10.1%). Despite these small differences in personal use, there are large differences in arrests as "black individuals are approximately four times more likely to be arrested for marijuana possession than are white people" (Rahamatulla, 2017).

General Strain Theory and Social Disorganization may possibly help us understand, in part, why these racial differences in drug arrest occur. In regards to General Strain Theory, minorities can experience a blockage of an important goal, financial wellbeing, and may seek ways to achieve the American dream by illegitimate means. Additionally, those who experience significant strain may want to forget about their problems by using mind-altering drugs like marijuana to medicate their pain. In regards to Social Disorganization Theory, some communities experience higher crime rates than others, which draws the attention of authorities, and increases the probability of coming into contact with the police. Fragmented neighborhoods, with highly depleted social capital, could also through neglect provide a suitable setting for a

drug market.

Theoretical Overview

General Strain Theory

Robert Agnew's General Strain Theory (1992) was an attempt to expand on Robert K. Merton's (1957) theory. Merton's theory was limited because it only focused on one type of strain, the inability to achieve financial success through legitimate means (e.g., going to college, opening a business, et cetera). Agnew reasoned that there were many other kinds of stress beyond failing to achieve economic goals that could lead people to commit crimes.

General Strain Theory expanded upon this and argued that strain could come from being denied the ability to achieve any personal goal, not just financial goals. Additionally, Agnew identified other sources of strain, beyond the failure to achieve personal goals, that an individual can experience which may lead to a deviant outcome. These sources of stress were as follows: anxiety can come from failing to achieve positively valued goals, pressure can come from the removal of positively valued stimuli for the individual, and strain can come from being presented with or anticipating negative stimuli (Agnew, 1992). Individuals failing to achieve their goals, losing the things they value most, or being treated negatively by others around them can lead to a negative reaction. This theory argues that the higher the number of strains a person has in their life, the greater the possibility that this individual will engage in socially disapproved behaviors.

Agnew also reasoned that other factors conditioned an individual's response to stressors, potentially diminishing the risk of an individual becoming involved in crime. These are the availability of having access to other valued goals, having additional resources to cope with strain, being self-sufficient or intelligent, and having social support from those around you. Creating strong bonds with the people who surround you and fearing consequences of

punishment from the law, can also diminish the possibility to engage in unlawful activities. Several factors can also increase the risk of an individual becoming involved in crime such as having poor self-control, associating with deviant peers, internalizing antisocial ways of thinking, and blaming others for current stressors and problems. General Strain Theory proposes that these factors "increase criminal behavior only when they occur in conjunction with strain" (Agnew, 1992). Emotion also plays a central role in this theory, especially negative emotions such as anger. These negative emotions can lead a person to engage in criminal behavior to release their anger.

The extant research suggests that exposure to strain or cumulative strain increases the probability that a person will engage in criminal acts (Agnew, 1992). Although this is true, there are also strategies that an individual must undertake to cope with a strain before they embark on an actual criminal or deviant act. Strain and anger combined can predictably lead to criminal conduct. Some factors can also increase the likelihood that experiencing strain will result in illegal actions. There is also an important distinction to make in this theory: not all individuals will resort to criminal acts to cope with the strain in their lives. Many times, people utilize other strategies to cope with these negative aspects of their lives. Agnew explained this coping process with four sequential stages: experiencing or anticipating experiencing objective strain, individuals subjectively evaluating or cognitively appraising strain, individuals experiencing an adverse emotional reaction to strain, and individuals coping with their strain with negative emotions providing the primary impetus for managing their anger (Agnew, 1992). Individual interpretations of strain and the emotional response to strain can impact coping processes. Overall, this theory is worth noting and examining when explaining why criminal behavior occurs among individuals.

Social Disorganization Theory

Another theory that can help explain the racial discrepancies in drug arrests is Social Disorganization. Clifford R. Shaw and Henry D. McKay developed the theory to expand on the ideas of Ernest Burgess's Concentric Zone Theory. This model ultimately led Shaw and McKay to conclude that neighborhood organization was a fundamental element that prevents criminal activity. Burgess's Concentric Zone Theory consists of separating a city into five concentric zones in which there are different levels of competition among the individuals in these zones. The zone of transition is a criminogenic zone for this particular theory since there are apparent signs of disorganization. Some houses are deteriorating, residents come and go from this zone, and waves of immigrants also come to this area. These factors lead to weakened ties in a communal sense, resulting in social disorganization.

To make better sense of Social Disorganization, Shaw and McKay studied the spatial distribution of delinquency in the Chicago area. They investigated this to determine if there was variation in the distribution of crime between concentric zones. Shaw and McKay found that the zone of transition was where delinquency flourished, and this led to the conclusion that "it was the nature of the neighborhood – not the nature of the individuals within the neighborhood – that regulated involvement in crime" (Shaw & McKay, 1942). It did not matter what type of individual or group lived in this area as the zone was persistently troubled by instability and crime. Shaw and McKay came to another conclusion as well – as individuals or groups moved to outer zones, their crime rates decreased. Therefore, Social Disorganization argued that it is the general nature of a neighborhood, not individual pathologies, that is criminogenic. How an area is organized determines the rebellious spirit of juveniles. The transition zone includes urban development, transiency, heterogeneity, and poverty, which are all factors that allow for social

disorganization, and ultimately crime, to occur. Shaw and McKay reasoned that just being in this type of area created high crime rates because there was a breakdown of control and exposure to a criminal culture that lures youth into a criminal lifestyle (Shaw & McKay, 1942). Since young people have no conventional institutions to turn to and are given little to no supervision, they are free to do whatever they want. They roam around wherever they want, thus becoming the next generation of transporters of a criminal lifestyle. Shawn and McKay were also interested in knowing about the lives of youth from a personal standpoint, and, as such, conducted interviews to ask delinquents about their criminal history and lives. From these interviews, they learned that many juveniles became involved in a criminal lifestyle because they had siblings or friends who committed criminal acts or associated with gang members. They also found out that the lack of stability within a neighborhood and no organization within the community created a lasting tradition for crime. Shaw and McKay concluded that there was no control within an area that lacked order, which exposed individuals to criminal culture. Social Disorganization Theory is a "mixed model" or "integrated theory" because it combines different social conditions to explain the absence of community controls while also learning cultural values. Overall, this theory focuses on how an individual's environment and the people surrounding them can lead them to commit criminal acts.

Application to Racial Disparities in Drug Arrests

General Strain and Social Disorganization are particularly adept at explaining why racial differences in the distribution of drug arrests exist. Research has found that minorities are arrested for drug-related offenses at a higher rate than for actual drug usage; "black Americans make up nearly 30 percent of all drug-related arrests, despite accounting for only 12.5 percent of all substance users" (Pearl, 2018). To understand why these disparities, exist, neighborhood

conditions and characteristics should be examined. For example, enforcement strategies that focus on greater presence of police in neighborhoods populated by minorities can provide an explanation as "communities with more ethnic-racially diverse populations may face greater scrutiny for drug offenses" (Donnelly, Wagner, Anderson, & O'Connell, 2019).

A recent study exposed the disparity in drug arrests between black and white drug offenders in Delaware. The investigation reported that "while black offenders represent about 21% of the state's general population, they make up 40% of arrestees, 51% of defendants convicted in the courts, and 57% of Delaware's incarcerated population" (Donnelly, Wagner, Anderson, & O'Connell, 2019). More importantly, the report argued that racial and class composition of a neighborhood contributes to these observed disparities. Additionally, black offenders were not afforded the benefit of discretion regardless of drug type possessed, while white offenders are more likely than minority offenders to be prosecuted for possessing more dangerous substances (such as cocaine). These arrests are often the result of overdose-related service calls. This demonstrates the disparity in drug arrests as well as the fact that minorities in our society do not have the same level of discretion as other members of our society.

According to Mitchell and Caudy (2017), national data on youth drug offenders has shown that minorities have greater arrest rates simply because they have greater involvement in drug offending. Additionally, it has been found that "minorities are more likely to sell drugs to strangers, in public places, or areas with heavy police presence" (Mitchell & Caudy, 2017). Although one could point to racial biases within the system as the sole cause of discrepancies in drug arrest rates, it would be unwise to do so since there are many other factors to be considered. Minorities may reside in neighborhoods where there are limited economic and social opportunities, leading to desperate measures being taken and becoming involved in criminal

activities. There is also the fact that many drug markets are concentrated in socially disorganized areas (inner-city neighborhoods) that are populated by minorities. These neighborhoods are of particular interest to law enforcement due to the nature and scope of drug distribution and usage.

Another study, conducted in St. Louis, examining the source of Black-White differences in drug arrests investigated levels of policing across 78 neighborhoods found support for racially discriminatory policing as the racial composition of a neighborhood shaped law enforcement practices. Additionally, the study reported that police tended to racially profile by targeting "suspects whose race was incongruent with the neighborhood racial context" (Gaston, 2019). There was also a stark race difference in punishment for drug crimes depending on race and drug offending. General Strain Theory may account for the higher rates of drug arrests since many people of color live in areas with greater police presence, high levels of economic disadvantage, and high crime rates. Strain such as poverty and living in high crime areas can lead people to search for an illegal measure to secure financial goals or, alternatively, lead those under tremendous stress to use drugs as a form of escapism. Social Disorganization can also explain these discrepancies. Non-whites are more likely to live in disadvantaged neighborhoods where contact with the police is not rare, and minorities can be arrested even for minor infractions. Overall, social disorganization within communities makes nonwhites experience a greater likelihood of interactions with the police.

A study conducted on non-Hispanic White, non-Hispanic Black, and Hispanic adolescents also evaluated race in the context of explaining the use of illicit drugs. This study applied General Strain Theory to explain their findings. Data was taken from 16,868 adolescents and came from the National Longitudinal Survey of Youth (NLSY). The study reported that specific events had a different effect among racial/ethnic groups when it came to the risk of illicit

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substance use. One difference found was that strains found in disorganized spaces seemed to affect the risk of illegal substance use among non-Hispanic Whites. It was also found that "illicit substance use among adolescents is generally higher among Caucasian adolescents, as is the use of legal substances like alcohol and tobacco, although most of these differences tend to even out among racial and ethnic groups by adulthood" (Ash-Houchen & Lo, 2020). This suggests that strain for non-Hispanic Whites increases drug use, but this is not reflected in drug arrest statistics. The strains (socioeconomic/social) measured in this study did not seem to affect non-Hispanic Black respondents.

Family relations were a possible strain for Hispanic respondents, but this was not the case for Caucasian respondents. Instead, support from parents or other family members was a buffer against possible drug use. Ash-Houchen and Lo (2020) also found that depression and legal drug use could increase the risk of illicit drug use. People of color seem to be more affected by strains in their life since "their experiences of discrimination, and the frequency of concentration in these high-poverty areas act as accumulative stressors, leading toward negative mental health outcomes or illicit substance use into adulthood" (Ash-Houchen & Lo, 2020). Many sources of strain can affect adolescents and lead to illicit drug usage and subsequent arrest for these actions. General Strain Theory has shown that acute and chronic strain in adolescents who have no means of escaping these strains leads to hostile states, emotional pain, and different means of relieving these strains. Many adolescents turn to criminal coping because they lack resources or see their strain as unjust or overwhelming. It was found that "treatment rates of racial and ethnic minority groups are lower than their Caucasian counterparts as well" (Ash-Houchen & Lo, 2020). Most often, African American and Hispanic adolescents are found in socially disorganized urban areas that have a high level of crime, poverty, and have single-headed households, et cetera. It has

been found that disruptions within the family "influence African American adolescents more strongly than their Caucasian counterparts, at least in terms of mental health" (Ash-Houchen & Lo, 2020). Living in these types of areas exposes youths to gangs and criminal lifestyles, which often leads to the illegal use/distribution of drugs. These factors combined increase the risk of being in contact with illicit drugs and coming into contact with law officials. In the end, it is clear that elevated drug use in socially disorganized neighborhoods that are heavily policed leads to disproportionate contact (arrests) to occur, but even so, there is little difference in drug use by race when all individuals who do not live in socially disorganized neighborhoods or suffer from strain are taken into account.

General Strain Theory can also explain the racial differences in offending. General Strain Theory highlights the emotional and social-psychological processes that lead to criminal behavior. Kaufman, Rebellon, Thaxton, and Agnew (2008) argue that African Americans suffer more unique types of strains than other racial groups, which leads to more negative emotions, which General Strain Theory posits as influencing criminal behaviors such as drug use/sale. African Americans experience higher levels of economic strain, as exhibited by higher unemployment rates. They also experience more tension within the family since parents undergoing hardships like poverty and divorce can take their frustrations out on their children. These family tensions, in turn, can lead to resentful youth who see crime and drug dealing as the only way to take their frustrations out with life and be able to get by. This particular community is also affected by a lack of resources in education, experience criminal victimization, and discrimination and many live in disadvantaged urban neighborhoods. Unique social conditions found among African Americans may also lead them to cope with these problems by resorting to criminal actions. It is clear that people of color, especially African Americans, are

overrepresented in our criminal justice system; in 2006, African Americans accounted for 28% of all offense arrests (Kaufman, Rebellon, Thaxton & Agnew, 2008). African Americans face more strain in various areas of life (economic, family, educational, discrimination, etc.). Overall, it is evident that structural barriers and tension found within specific neighborhoods composed of minorities can account for involvement in a crime.

Racial discrepancies in the distribution of drug arrests also relate to the environmental characteristics of drug dealing locations. Locations must be chosen carefully by illicit drug dealers since they operate in open-air markets and must look for customers while being under the threat of getting caught by law enforcement. There is also the added risk of non-cooperative customers and other competitors looking to hurt potential business ventures. Researchers have concluded that specific environmental characteristics make optimal locations that balance all of the potential problems mentioned before. A study in Chicago examined drug-dealing areas and compared different environmental aspects to different types of drugs. Data showed that certain features in these locations increased the risk for drug dealing to occur. According to Barnum et al. (2017), sites should be found in proximity to areas of high activity and involve transportation routes for customers and dealers to feel assured of escaping at a moment's notice. A location should also afford the dealer the security to come up with an excuse as to why they are in that area if questioned by law enforcement. Dealers also see spots as more valuable if they contained places in which to hide the merchandise. However, drug dealing locations were not very different from one another and features were often typical to drug dealing locations, such as stiffer penalties for some drugs, some sellers claiming a drug that only they can sell, and gun ownership. These variations influence where a dealer can set up their drug dealing business. The essential features, though, were undoubtedly customer accessibility and security from legal and

physical threats. Certain strains found among drug dealers/users can ultimately lead to criminal problems. Drug dealers are often looking to make money within the means they have; therefore, they target people/locations that are easy targets or are undergoing other problems that they think will be handled with drug usage/distribution. Drug dealers themselves often face socioeconomic issues such as unemployment and poverty that lead them to this criminal lifestyle. Specific locations are certainly optimal for drug dealing. These locations can be detrimental for drug users/dealers that may get in trouble with the law later on for their criminal acts.

There are also racial differences in contacts with the police, which can be explained by heavy police presence found in socially disorganized areas where a majority of minorities reside. Researchers have found that race disparities in arrest rates cannot be explained simply by differences in criminal behavior. In a Seattle study, factors such as family, peers, school, and community were examined to explain racial disparities in police contact. The study used data from 331 eighth-grade students in a Seattle school district. Crutchfield et al. (2012) found that Black students were twice as likely to report having police contact than White students, and Black students reported engaging in more property crime, but not more violent crime than White students. It was also found that if a child had a parent arrested or a sibling who had also been involved in criminal activity, it was likely that contacts with the police could increase. Police contacts would also increase if negative behavior in children were rewarded by adults, if a child had school disciplinary actions, and if adults who abused substances were also involved in criminal behavior. School discipline was also related to racial differences in police contacts. The social environments of young people of color and White juveniles differ, affecting their arrest rates and their contact with law enforcement. Social Disorganization plays a role since people of color are more likely to live, go to school, and work where there is more police presence or more

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surveillance. Therefore, interaction with the criminal justice system is not unlikely. There are also many strains found within these youths' lives that can lead them on an illegal pathway. African Americans live in these neighborhoods due to racial residential segregation. Therefore, they are more likely to experience victimization and crime. Strain also comes from being over-policed.

A study in Missouri investigated the impact of neighborhood context and race on officer decision-making and enforcement practices. This study analyzed 144 official reports documenting drug arrests in a racially mixed disadvantaged neighborhood in St. Louis. Gaston and Brunson (2020) found that the place and race of the offender played a significant role in determining investigative decisions made by officers. Pedestrian and proactive traffic stops drove most drug arrests. Enforcement practices were different in racially mixed neighborhoods, where encounters seemed to be driven by race (Gaston & Brunson, 2020). Both the race of a person and the area they live in can be influential factors that lead to higher arrest rates for drugs, especially in disadvantaged communities. The strain of scarce resources within these communities, like a lack of healthcare or education, can lead people to search for alternative/criminal methods. Pressure for officers such as having to keep up with quotas can also affect these disadvantaged communities, further straining the relationship between law enforcement and the community. Officers themselves also feel strain in their jobs because they perceive their jobs as more challenging and involving dangerous aspects that a regular citizen couldn't understand.

When discussing racial differences in drug arrest distribution, it is also important to note the different types of communities in which illicit drug activity occurs. Although illegal drug activity can happen in any community, research has mainly focused on drug markets, and crime found at the city level. A study in Miami used data from neighborhoods to assess the effects of

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drug activity and social disorganization on robberies and aggravated assaults. Martínez, Rosenfeld, and Mares (2008) found that drug activity had a substantial impact on violent crime. Drug activity was also found to be concentrated in neighborhoods that contained low rates of immigration, less ethnic heterogeneity, and where accidental deaths not related to drug activity are preventable (Martínez, Rosenfeld & Mares, 2008). Neighborhood racial composition also didn't affect drug activity or violent crime. Some of the exact dimensions of social disorganization associated with high rates of violent crime can also help explain the drug activity within a neighborhood. Socioeconomic disadvantage and residential instability within a neighborhood can lead to higher levels of drug activity and violence. Strains such as difficulty keeping a job that pays well and high rates of family disruption can be detrimental and can lead a person to act out and resort to violence or illegal measures. Overall, the organization of a neighborhood can be very influential in the actions that an individual takes regarding criminal behavior.

Racial discrepancies in drug arrests can be explained, in part, by General Strain and Social Disorganization theories. Minority communities are noticeably more scrutinized for drug offenses. The social disorganization found within these communities makes individuals more likely to come into contact with law enforcement. Neighborhood factors such as being surrounded by drug markets or having limited legal, economic opportunities, and being pressured by the people who surround you can lead individuals to become involved in drug crimes. All of the previously mentioned factors can also influence arrest decisions resulting in racially biased outcomes. General Strain Theory can also be applied to understand race differences. Youth observing criminal acts in their environment and suffering from stress (strain), such as the lack of educational or economic opportunities, may increase the likelihood of exploring alternative

(illegal) measures to get by and, as a consequence, leads to more contact with the police. Strain from socioeconomic and social factors will also influence drug arrest rates. Individuals in some cases see that they haven't achieved positively valued goals such as going to college or obtaining a well-paying job. Therefore, they feel like failures. These individuals have had positively valued stimuli removed from their lives. Positively valued stimuli could be a parent on which to rely or be involved in an engaging school activity like a sport. Strain can also come from being presented with or anticipating negative stimuli. These negative stimuli can come from being pressured by family or friends to join in on illicit activities or just being rejected by society for engaging in criminal acts. Overall, many factors can lead a person to an unlawful way of life.

Policy Recommendations

The criminal justice system should address the underlying issues that can lead an individual to consider a criminal lifestyle. Moreover, this strategy avoids the social costs of a war on drugs that focuses too much on punishment. Of course, the criminal justice system would need to partner with other institutions to achieve this end. Investments in educational or vocational programming should be expanded to increase legitimate opportunities as well. In terms of assisting those involved with drug offending, rehabilitation and treatment programs should be made widely available. Alternative sentencing strategies such as drug court programs could also be beneficial by providing services needed to help offenders reform their lives and become productive members of society. Although implementing these programs can be challenging, law and order measures have not been very successful in diminishing drug crimes; therefore, we must look to other options to benefit our communities and bring about positive social outcomes.

Conclusion

Racial disparities in drug arrests may be accounted for, in part, by General Strain and Social Disorganization theories. Regardless of what opinion one has about the War on Drugs, the consequences have a clear impact on the minority community. The heavy scrutiny of minority communities by law enforcement creates an environment that causes a vicious cycle of arrest, incarceration, and reentry into the same crime-ridden community. It is clear that problems in our society are not caused by drugs alone; these problems evolve from a cycle of racial inequality and the absence of resources. The War on Drugs never attacks the root of the problem, but simply responds to the symptoms of a myriad of underlying causes. In the end, drug crimes will not be diminished by employing only law and order measures. As such, we need to break from the chains of our punitive mindset and explore options that addresses the root of the problem for the benefit of society.

Historical and Contemporary Attitudes Towards Marijuana

Abstract

Marijuana has experienced various degrees of public acceptance in the United States. For many years, marijuana was considered a drug that threatened public health; however, over the past decade, public opinion has changed, which has resulted in the legalization of marijuana for medicinal and recreational use. Once a far-fetched notion, the legalization of marijuana at the federal level is gaining traction. The purpose of this paper is to explore how views of marijuana have become more tolerant, resulting in the decriminalization or legalization of the drug in many states.

Introduction

  Throughout the history of the United States, marijuana use has experienced various degrees of public acceptance. Once a common ingredient in some medicines, this drug was prohibited for a lengthy period and subject to, sometimes severe, criminal sanctions. The past decade, however, has demonstrated a shift in the acceptance of marijuana as more and more states have legalized the medical and/or recreational use of marijuana. Presently, 18 states and the District of Columbia have legalized the recreational use of marijuana, while 36 states and D.C. allow for its medical use. Another 12 states limit medical access to cannabidiol (CBD) products only. While marijuana legalization has taken place at a state level, it remains illegal under federal standards. With the movement towards the possible legalization of marijuana at a national level, the paper will explore the potential reasons for the shift in public attitudes towards marijuana.

The Criminalization of Marijuana

  For thousands of years, marijuana has been used in various forms worldwide, with its earliest usage dating back to ancient China (Brewer, 2013). This drug was commonly used for medicinal purposes to provide relief for various symptoms and physical conditions. Although marijuana came to be known to the western world somewhat recently, considering the extent of its usage worldwide, many changes have occurred since its introduction in the United States in the late 1800s. Hemp was a product that was widely used before the 1900s for various necessities of the time like rope, paper, and clothing. By the late 1800s, there was a rise in the use of marijuana for medicinal purposes, and it was a commonplace product sold at pharmacies. Several regulations introduced during this time led to the classification of marijuana as a narcotic, but a defining shift for decades to come occurred between 1900-1920s. With the end of

the Mexican Revolution of 1910, there was an influx of Mexican immigrants into the United States. With this influx also came the introduction of marijuana. This association of marijuana with Mexican immigrants led to negative stereotyping of these immigrants. The American public saw these immigrants as having weak moral compasses and being unintelligent for using a drug that anesthetized brain function. According to Newton (2017), racism towards Mexican immigrants was not the only reason for the criminalization of marijuana. The second reason involved worries surrounding the usage of marijuana as a substitute for other dangerous drugs that were already heavily criminalized, such as cocaine and heroin. Arguably, if users of these more powerful narcotics were unable to access them, they could turn to marijuana since it was more accessible. Lastly, a general temperance movement controlling mind-altering and other types of recreational substances was taking place in many countries across the globe. Many countries were criminalizing marijuana usage, which prompted the United States government to subscribe to the anti-marijuana sentiment communicated at various international conventions. As such, marijuana was no longer considered a useful and safe drug.

Religious and Political Influences

Religion and politics influenced the anti-marijuana sentiment within the United States. During the 1900s, many laws were passed prohibiting the use of marijuana at the national and state level. Politicians connected with their constituents through the prohibition and criminalization of marijuana. Utah was the first state to legally ban marijuana in 1915. After Utah criminalized the drug, many other states followed suit. The Mormon church was also the first religious institution in the United States to take an official stance against marijuana use. According to their church doctrine, worshipers are banned from using any mind-altering substances including caffeinated beverages such as coffee and tea. Since marijuana is a mind-

altering drug, it was prohibited by the Mormon church. After state governments took these prohibition measures, a series of acts passed that controlled the sale and use of narcotic drugs and limited possession to individuals who could pay an excise tax for medicinal and industrial purposes. With the implementation of the Controlled Substances Act of 1970, individuals could face a fine or even be incarcerated if found in possession of marijuana. The Substances Act of 1970 is the current law today, employing a classification system that determines how dangerous prohibited substances are. These schedules classify drugs on three dimensions: how addictive a drug is, medical benefits, and level of danger to those who obtain it through prescription. With the creation of these schedules, marijuana became a Schedule I drug. By definition, a Schedule I drug is a drug that has a "high abuse potential with no accepted medical use; medications within this schedule may not be prescribed, dispensed, or administered" (Gabay, 2013, Table 1). Federal standards strictly regulate drugs under this classification.

Contrary to what religious and political leaders had argued, The National Commission on Marihuana and Drug Abuse of 1972 conducted a scientific investigation of marijuana and reported the effects on users is not as dangerous as suggested The Commission determined that marijuana usage should not be criminally penalized, but this did not stop Nixon and others from pushing their anti-marijuana rhetoric, ignoring the facts that the Commission had reported. A Nixon aide, John Ehrlichman, once mentioned that "the Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and black people" (A brief history of the drug war, 2021, para. 6). By associating heroin with black people and marijuana with hippies, the government effectively disrupted these their efforts against the government. It vilified them as a whole under the guise of drug control. Although the public had access to this new information on marijuana, their opinions on marijuana did not change since the influence of

government propaganda was relentless communicated to the public. A different perspective towards drug use took hold during president Jimmy Carter's presidency. According to Newton (2017), Carter had opposing views on how marijuana should be dealt with and believed that decriminalization, prevention, and treatment were the best ways to deal with marijuana issues. Carter thought that "penalties against possession of a drug should not be more damaging to an individual than the use of the drug itself" (Newton, 2017, p.78). Although this was Carter's viewpoint, presidents that came after continued to amplify a draconian law and order approach towards marijuana usage and distribution, particularly during the Reagan presidency. From the 1980s on, there was a relentless anti-drug agenda, and since this time, federal laws have not changed much. Although this is the case federally, at a state level, significant changes have occurred in the past decade, with the legalization of marijuana for recreational and medical use. More change will undoubtedly come in the future since many states follow the example of other states that have already legalized, and voter attitudes towards marijuana become more tolerant.

Legalization and Decriminalization: Changing Viewpoints

Serious discussions about the legalization and decriminalization of marijuana did not take place until the 1980s. Currently, 25 states and the District of Columbia have decriminalized marijuana. Decriminalization often means that there will be no conviction, jail sentence, or criminal record for the first-time possession of a minor amount of marijuana for personal use. In the majority of decriminalized states, these crimes are regarded as minor traffic violations. Legalization, on the contrary, sets different boundaries for the use of marijuana. According to Wolf, Coalition, D., Pedini, Norml, and Strekal (2021, para. 1), legalization is defined as a policy that promotes a lawfully regulated marijuana industry in which users can purchase marijuana for personal use from a reputable legal source. Differing and often accepting attitudes regarding

marijuana emerged post-1980s due to changes in religious identity and diminishing perceptions of the dangerousness of marijuana. According to a study conducted by the Journal of Social Science Research using survey data, "changes in cannabis legalization support since the 1980s are largely the result of intra-cohort changes in attitudes as opposed to cohort succession" (Weedmaps, 2019, para. 5). In other words, support for legalization was not a function of changing demographics; Instead, it was a gradual change in attitudes across generations. It is apparent that "both younger and older people developed more liberal views about the legalization of marijuana at a similar pace over the last 30 years" (Adamczyk & Thomas, 2019, para. 5). Increasing support for legalization was also due, in part, to the decrease in religious affiliation among the American public since 1991 as "the evolution of religious identity accounted for 12 percent of the attitude change" (Weedmaps, 2019, para. 5). It is documented that females are less likely to favor the legalization of marijuana than males. According to research conducted by the North Carolina State University and Hartwick College, women's "greater religiosity substantially explains the gender gap in marijuana policy" (Jaeger, 2018, para. 7). Although this can partially explain the gender gap regarding support for legalization, more research needs to be conducted to determine what other factors can account for these differences.

Research on the media has found that it can "influence public opinion on drugs and drug use" (Adamczyk & Thomas, 2019, para. 4). News coverage may have also contributed to the shifting view of marijuana. The news media often covers stories on how marijuana is used for medicinal purposes and the positive effects it has had on users who are suffering from health problems. This positive publicity has led to "a decrease in the percentage of people who see it as harmful" (Weedmaps, 2019, para. 7).

Throughout U.S. history, the media has played an essential role in influencing public opinion on various topics. The media played a significant role in exacerbating public fears about marijuana in the 1930s. This negative publicity influenced the prohibition of marijuana by swaying public opinion, casting the drug in a negative light. For many years, the media has been carrying out political campaigns and various presidential propaganda. These messages about marijuana, positive or negative, affected the public's views on their support for marijuana. Media attention towards drugs has mainly been negative throughout the years, but there has been more of a positive presentation of marijuana beginning in the 1990s. An analysis of the New York Times articles found that "by the late 1990s, marijuana was rarely discussed in the context of drug trafficking and drug abuse" (Adamczyk & Thomas, 2019, para. 12). As media increases coverage of the benefits of medical marijuana and heightened publicity of states that have legalized recreational marijuana increases, there will likely be an increase in individuals who favor legalization in their particular states or at a national level. It is clear that "gradually, the stereotypical persona of the marijuana user shifted from the stoned slacker wanting to get high to the aging boomer seeking pain relief" (Adamczyk & Thomas, 2019, para. 12).

Although research has been conducted on the effects of the media on public opinion regarding drug use, there is not much research on how exposure to the media influences public opinion on the legalization of marijuana. One study examined American attitudes using General Social Survey data from 1975 to 2012 to evaluate the relationship between media exposure and support for legalization. Stringer and Maggard (2016, para. 1) found that "while media exposure was not significantly related to attitudes about marijuana legalization from 1975 through 1990, both television and newspaper exposure had a significant positive relationship with favorable views toward the legalization of marijuana from 1991 through 2012". It is clear from the results

of this study that media exposure did not significantly affect attitudes toward legalization before 1990, but a change in attitudes did occur after the 1990 period. Marijuana began being viewed in a more positive light in this post-1990 period due to various positive information published on the usage of marijuana. This study also found that the level of marijuana-related content that an individual consumes is also likely to influence attitudes on marijuana. This finding is significant because the level of positive or negative content that individuals consume regarding marijuana legalization may affect their support for or opposition to legalization. Overall, it is clear that the media can significantly influence the general public regarding marijuana policies.

Legalization and decriminalization may have also materialized because the perceived risk of marijuana has decreased. According to Blevins et al. (2018), the public seems to be less concerned about the increased use of marijuana in recent years. Still, occasional or regular use of the drug does raise some concerns for some citizens; this "accounted for 38 percent of the decrease in disapproving attitudes toward legalization over the 2002-2014 period" (Weedmaps, 2019, para. 8). Criminal justice views have also changed over the years. In the 1970s, there was a push for extreme punitive measures against drug usage. Unfortunately, "in the late 1980s, the 'war on drugs' and sentencing reform laws put a large number of young men, often black and Latino, behind bars for lengthy periods" (Adamczyk & Thomas, 2019, para. 15). This anti-drug rhetoric has changed in recent decades because the public has realized that this policy is excessively punitive and is creating more harm than good in our society. Finally, it has also been noted that residing or bordering a state where marijuana is legal does not indicate favoring or opposing attitudes towards legalization (Adamczyk & Thomas, 2019).

Support for marijuana legalization has increased among the American public over the last several years. A Pew Research Center survey found that "two-thirds of Americans say the use of

marijuana should be legal, reflecting a steady increase over the past decade" (Daniller, 2020, para. 1). Attitudinal polls have shown that fewer than 8% of Americans would like marijuana to be entirely illegal, while 91% of adults agree that marijuana should be legal for medicinal or recreational purposes (Daniller, 2020). When discussing legalization, it's also important to note the partisan gap in opinions. For years there has been a divide between Democrat and Republican views, and marijuana legalization is not the exception. While 78% of Democrats support legalization, only 55% of Republicans support legalization.

There are also differing levels of support across generations depending on political affiliation. Millennial Republicans have a 7% difference in comparison to Millennial Democrats when it comes to favoring legalization. It was found that "Gen X and Boomer Republicans are more closely divided, with 55% of Gen X Republicans and 49% of Boomer Republicans favoring legalization" (Daniller, 2020, para. 6). Republicans in the Silent Generation are more likely to oppose legalization, with just 21% favoring the legalization of marijuana. Overall numbers show that "nearly six in ten Americans (59%) favor legalizing marijuana for medical and recreational use, while another 32% say it should be legal for medical use only, and only 8% say it should not be legal" (Daniller, 2020, para. 7). Regarding political affiliation, Democrats (68%) are more likely to favor legalization for both medical and recreational use, compared to 49% of Republicans. Republicans (38%) are also more likely to favor the legalization of marijuana for medicinal purposes. Overall, it is clear that many factors come into play when discussing support for legalization.

In recent years, the American public's support for the legalization of drugs has undeniably increased, but how did this shift happen? A few options can be ruled out. For one, it isn't about drug consumption. Marijuana consumption has grown; however, this rise is not

enough to have a significant impact on views. Second, it is not the case that aging generations are being displaced by younger people who favor legalization. Third, despite the country's political polarization, when it comes to drugs, Americans have been changing their views toward legalization as a whole. People disaffiliating from religion could explain some of these differences in opinion, but this aspect accounts for only a small part of the transition. So, what is causing this change? What has possibly made a difference is how marijuana has been depicted in the mainstream media. Support for marijuana legalization grew rapidly when the media started framing it as a medical problem. During the 1990s, news of marijuana in criminal contexts became less common. Meanwhile, the number of publications addressing marijuana's medicinal applications gradually grew. Marijuana was rarely talked about in the form of drug trafficking and violence by the late 1990s. Mass media has also shown marijuana in a positive light. We have gone from reefer madness (1936) in the 30s discussing how detrimental marijuana use could be, especially to young people to having movies such as Cheech and Chong (1980), dazed and confused (1993), and Pineapple Express (2008), to name a few, showing protagonists using marijuana, and presenting it as a harmless fun substance. These coming-of-age movies that are popular with younger generations could have impacted the perceived dangerousness of marijuana. Whatever the initial push towards legalization was, it is clear that views have shifted dramatically and are spreading rapidly.

Drug Courts

Support for treatment over punishment has led to a growing increase in the use of drug courts. Many states have implemented treatment initiatives that could more adequately deal with the country's current drug epidemic rather than relying strictly on punishment. One of these initiatives has been the implementation of drug courts. Drug courts have taken a different

approach when dealing with drug offenders and have opted to deal with drug crimes by focusing on individual offenders and their specific needs. These drug courts aim to break cycles of abuse by giving community-based treatment and rehabilitation to offenders. Instead of giving out lengthy prison sentences, drug courts focus primarily on individual offenders and examine predictors of success and analyze various judicial and therapeutic strategies as intervention methods. Past intervention strategies such as incarceration or probation do not always work given the high recidivism rates.

The drug court model focuses on integrating drug treatment with community supervision, focusing on behavioral change on the part of offenders. Researchers have come to praise drug courts and have found that these courts work better for offenders who have a higher chance/risk for recidivism. Giordano (2014) found that there are differing opinions on how drug offenses should be handled. Many believe that mandatory sentencing policies should continue, while others believe that the system should focus on rehabilitating drug offenders. A study conducted in Pinellas County, Florida, found that when asked how the drug problem in this country should be solved, a majority, more than half of respondents, opted for drug treatment instead of incarceration (Giordano, 2014). Overall results showed that most people would be open to having a reform regarding the war on drugs but are consistent in their view that the courts should still monitor offenders. It is clear that citizens are becoming ever more aware that current measures, such as mandatory sentencing policies, are not working. Drug court programs have become an option for many that see it as a measure that could create less social harm and, in the end, help solve the long-term problems associated with marijuana usage and distribution.

Public perceptions on how the country's drug problem should be handled are also important. In a southern university, 575 undergraduate criminology and criminal justice students

were asked to give their opinion on sanctioning approaches used on violent and nonviolent drug offenses. It was found that the students "supported a justice approach when dealing with violent drug offenders, and a rehabilitation approach for nonviolent drug offenders" (Sloas & Atkin-Plunk, 2019, para. 1). It was also found that although there were fewer instances of support for rehabilitation for violent offenders, there was still some balance between a justice and rehabilitation approach, meaning that overall, rehabilitation approaches were more favorably viewed by this university population. This demonstrates how important it is to understand how the public feels about specific rehabilitative methods and how certain factors can sway the public towards one approach. Public opinions can influence the actions that government entities take.

There have been several studies conducted around the country that evaluate the effectiveness of drug court programs. The Ada County drug court program in Idaho, a city court, was studied. This study examined the records of 133 participants. Koetzle, Listwan, Guastaferro, and Kobus (2015) found that treating drug offenders in the community through an intensive service-based approach was more effective than simply placing them under probation supervision. High-risk offenders benefited more from this program and had lower rates of recidivism compared to their probation counterparts. To graduate from this program, participants had to complete all treatment requirements and have received clean drug test results for six months. Participants who lacked a high school education were also required to obtain a GED or demonstrate that they were taking necessary actions to obtain it by taking exams or classes. Lastly, participants also had to prove that they were full-time employees or students and paid the restitution owed. These requirements led to more successful participants whose graduation numbers corresponded to the court's graduation rates, demonstrating the potential success that drug courts can have.

Another study on a drug court program was conducted in a suburban city in the Midwest. This study discusses the long-term impact that drug court programs have on recidivism rates for offenders who graduate programs and those who do not. This study examined the demographic and legal factors that can influence an offender's recidivism. The study sample consisted of 249 participants, and they were evaluated after they had already been out of the program for more than five years. This study focused on specific outcomes like re-offending rates, educational attainment, employment, and drug use relapse. Participating in the drug court program regardless of program completion had better results for offenders in the long run (DeVall, Gregory & Hartmann, 2017). The study also concluded that the amount of time in the program and the offender's interest in getting help and being transparent with their drug use habits was a significant influence in determining the recidivism possibility of an offender. It was also found that even after graduating from drug court programs that offenders should still undergo a follow-up. A follow-up is done to ensure that offenders do not sabotage the progress made during their time in the program.

There are some limitations to the use of drug courts for marijuana since the drug court model does not apply to all kinds of marijuana users. The National Institute on Drug Abuse found that "adults seeking treatment for marijuana use disorders have used marijuana nearly every day for more than ten years and have attempted to quit more than six times" (NIDA, 2021, para. 1). Drug court treatment would be more effective for individuals addicted to using marijuana, not just those who use the drug sporadically. The use of marijuana, in addition to other substances such as cocaine or alcohol, could also point to a greater need for drug treatment. To adequately provide treatment for offenders addicted to marijuana, drug courts would have to include different types of treatment such as cognitive-behavioral therapy to help offenders

control their urge to use marijuana or other drugs. It has also been found that "about 9 percent of people who abuse marijuana will develop an addiction to the drug in time" (NIDA, 2021, para. 1). However, marijuana addiction is not very prevalent among adults, the risk for addiction increases when individuals start using the drug constantly in their teens. Drug court programs should take into account the level of addiction that offenders exhibit and how to best implement rehabilitative methods that will bring about the best results.

There are still many aspects of these types of programs that have not been adequately assessed. One of the questions regarding these programs is if they should all provide educational opportunities, job instruction, and other resources to improve participants' outcomes. Alternative sentencing strategies such as drug court programs could be a beneficial alternative to traditional sentencing. Still, the question remains as to how successful these programs can be when implemented on a large scale around the country. There is also the question of funding these programs and finding the resources necessary to have successful outcomes. Public opinion will also be undoubtedly influential in implementing these types of programs. However, more research has to be conducted, and the question still stands as to how much support these types of programs will receive at a national scale. Although implementing these programs could be challenging, we should focus on recovery measures that would focus on the root of the drug problem in this country.

Conclusion

Throughout U.S. history, there have been varying degrees of acceptance for marijuana. Marijuana went from a commonly used drug in the 1800s to being widely feared by the public and criminalized. From the 1900s on, marijuana usage was largely frowned upon and was also heavily punished. Religious and political influences played a significant role in the anti-

marijuana sentiment created in the United States. Widespread attitudes favoring marijuana legalization and decriminalization did not take hold until the early 1990s, and from this point on, these tolerant viewpoints have increased. The rhetoric around marijuana legalization has also changed. The media has taken a more positive stance on marijuana debates, especially legalization, which has influenced public opinion. There has also been more of a push towards treatment, rather than punishment of offenders. In the end, the legalization of marijuana in every jurisdiction, both state and federal, does not seem like a far -fetched idea given the rapid changes that have occurred over the past decade.

Impact of Recreational Marijuana Legalization on Youth

Abstract

      This paper provides an overview of how the legalization of recreational marijuana has impacted crime rates, law enforcement, and what social and political factors may impact legalization efforts. Marijuana legalization around the world will also be briefly touched upon. The final section will discuss the findings from state-level data comparing adolescent marijuana use in states that have and have not legalized recreational marijuana. Limitations of the current study will be discussed.

Introduction

Marijuana was long thought to be a dangerous substance in the United States. This position against marijuana usage has abated in recent years, as exemplified by the number of states that have legalized recreational and/or medical marijuana. State regulations are gradually evolving, so much so that there are even talks in Congress about decriminalizing recreational marijuana at the federal level. Despite these rapid developments in marijuana legislation, there are still many states that are opposed to the legalization of recreational marijuana for various reasons.

Social and Political Factors

A state's social and political characteristics will, undoubtedly, impact any effort to legalize marijuana. Currently, 36 states have legalized the use of medical marijuana, and 18 have legalized recreational marijuana. Another 25 states, as well as the District of Columbia, have decriminalized marijuana.

Spetz et al. (2019) conducted a recent study in which they analyzed marijuana laws to determine what social and political factors exerted influence on legislation. In order to identify patterns for or against the legalization of marijuana, the demographic composition, culture, politic orientation, economy, and other drug policies were analyzed. The major finding of this study argued that in order for there to be widespread support for the legalization of any drug, and in this case marijuana, there must be a legalization movement across several states. In the last 20 years, we have witnessed a more tolerant approach to marijuana policies take hold, and once western states became more inclined to legalize this drug, other states in the northeast, and subsequently states in the northern central and mid-Atlantic regions that shared similar political and social characteristics, followed suit. This finding points to a clear geographical pattern, and

also emphasizes how a change in marijuana policy will be difficult if certain states are not willing to follow the example of other jurisdictions that are very similar to their own, such as states located in the Southeastern and Central regions" (Spetz et al., 2019, p. 174). It is clear that certain regions will oppose the legalization of certain drugs like marijuana simply because they have different social and political attitudes.

In states in which there was a move towards the liberalization of marijuana policy there were strong patterns for some social and political features. Spetz et al. (2019) found that these states tended to be marked by significant immigrant communities, low commodity development rates, low number of followers of Evangelical Protestantism, weak religious observance, and weak political conservatism. States that were against the liberalization of marijuana policy stood in stark contrast. These states were primarily clustered in the south-east and central regions, and had views that skewed towards Evangelical Protestantism and heavy religious observance. There were also disproportionately low representations of Asians and immigrants, and a large proportion of jobs were goods-producing occupations. It is clear that many factors exert some influence, however, religious beliefs were the most prominent factor in the acceptance or rejection of changes to marijuana policy.

The choice for voters to introduce initiatives and referendums is compatible with libertarian opinions on government enforcement and legislative reforms that could apply to drug policy. It is apparent that the way in which citizens view the liberalization of marijuana policy will undoubtedly influence what actions are taken by leaders and politicians, but actually providing citizens with the opportunity to vote on issues like drug policy will bring about significant change. National advocacy organizations have also pushed for the liberalization of marijuana policy by providing republican candidates with economic incentives in order to

change marijuana policies in more conservative states. This is crucial since legalization of recreational marijuana has been found to be beneficial for state budgets since Colorado collected $387 million in 2020 from tax revenues and California "collects more than $50 million a month" (Rosalsky, 2021). This initiative has been successful in some instances since many lawmakers have started to view these permissive policies as ways in which to increase positive revenue streams for the state. Legalizing marijuana is also favored more by young people than older people, raising the possibility for nationwide liberalization of marijuana policies over time. It is clear that even if the liberalization of marijuana policy occurs at a national scale, there will still be differences in the way in which these laws are imposed, but there is undoubtedly a need to continue evaluating how these policies are affected by the social, economic, and political makeup of states.

Impact on Crime

Research on drug use and legalization/decriminalization reveals two opposing perspectives on how they impact use, abuse, and criminal activity. According to the first paradigm, loosening regulations would encourage more marijuana use (Cerdá et al., 2012). When discussing the legalization and decriminalization of marijuana, it is important to understand the relationship between these policy changes and their impact on crime. Some research has suggested that those who use marijuana are more prone to engaging in violent and property offending; as such, the increase in the number of marijuana users as a result of legalization may lead to an increase in crime (Bennett et al., 2008). Marijuana retail shops may also incentivize crimes since they are vulnerable businesses that run on cash and merchandise that is easy to use and appeal to many. This paradigm puts forward a negative view of legalization. An alternative paradigm suggests that marijuana legalization would have little impact on crime rates. Some

research has suggested that violent crime rates could *decrease* because violent predispositions would be suppressed with marijuana use (Miller, 1990). It has also been found that marijuana users are not more likely to commit crimes (Pedersen & Skardhamar, 2010). Also, as marijuana is legalized in several states, it is expected that the systemic violence innate in the illicit weed market will lessen (Aalen, 2013).

According to Lu et al. (2019), due to inconsistent evidence, it is challenging to draw conclusions about the impact of legalization on crime rates. There is some mixed evidence to suggest that marijuana consumption is related to criminal activity. However, no study has been conducted to determine if people who use marijuana following legalization vary in their lawbreaking from those who used marijuana prior to legalization. Lu et al. (2019) explored how the legalization of recreational marijuana affected crime rates in Washington and Colorado. The authors sought to determine whether crime rates rose in Washington and Colorado as opposed to states that have extensive marijuana regulations. Lu et al. (2019) collected yearly data from the Uniform Crime Reporting Program Data: Offenses Known and Clearances by arrest (1999-2016). This study used a quasi-experimental, multi-group interrupted time-series design and found that marijuana laws in general, and recreational marijuana legislation in particular, have had no impact on major crime in Colorado and Washington State. Curiously, there was a substantial *decrease* in burglary rates in Washington. The researchers also found no statistically significant long-term impact of legalization or retail purchases of marijuana on violent or property crime rates. There were some immediate spikes in violence after legalization, but these were short-lived. The findings in terms of violent crime are clear: recreational marijuana legalization has not resulted in a substantial increase in crime rates. Lu et al. (2019) also reported that legalization has not had negative effects on public safety. Marijuana legalization may also

have an effect on other types of crimes such as DUIs, or be influenced by criminal sanctions or law enforcement efforts, but the current study did not analyze these factors. Overall, the research on the effect of marijuana legalization on crime is limited, therefore, more research should be conducted on the subject.

Impact on Law Enforcement

In order to better understand how the legalization of marijuana can impact clearance rates, data has been collected from Colorado and Washington. Makin et al. (2019) analyzed data using a time series model to see what effects legalization had on clearance rates. The study was examined multiple police agencies in each state to determine if clearance rates had been impacted. This study wanted to investigate a common argument that legalization of marijuana allowed police departments to focus resources on other law enforcement activities that could lead to an increase of crimes cleared by an arrest. The study argued that legalization was beneficial as "clearance rates grew more in Colorado than in the rest of the country for all crime types except aggravated assault and motor vehicle theft and similarly rose more in Washington than in the rest of the country for violent crimes and burglary" (Makin et al., 2019, p. 47). It was also found that no type of crime negatively impacted clearance rates in Colorado and Washington. This is a significant finding suggesting that legalization can improve investigation outcomes as this upward in clearances began when marijuana was legalized. Once can reasonably conclude that police departments are focusing their resources on other offenses, and that these crimes are cleared with greater frequency because officers no longer devote their time to minor drug offenses. Legalization could have also encouraged police departments to re-prioritize their efforts, focusing on cases that had low clearance rates. Another explanation revolves around the fact that police officers are sometimes evaluated for arrests and, as such, have transitioned to

meet performance expectations in a setting where marijuana offenses can no longer be used to produce successful performance outcomes.

When discussing the potential challenges of legalization, it is important to understand how these changes can impact border states that continue to outlaw marijuana. Ward et al. (2019) explored the challenges that neighboring states encountered after Colorado legalized marijuana. Survey data was collected from 97 sheriff's offices and 228 municipal police departments in three states -- Kansas, Nebraska, and Wyoming – that had not legalized marijuana. The study reported that "law enforcement officers viewed Colorado's legalization of recreational marijuana as having a negative impact on their enforcement duties" (Ward et al., 2019, p. 217). Respondents also noted an uptick in the potency of the drug, apparent increase in juvenile use, and pressure on their duties as law enforcement personnel as major problems they are currently facing. The study also reported that police departments that are furthest away from Colorado perceived less influence than those counties that border Colorado. Wyoming respondents also expected a greater impact on law enforcement, but these disparities declined after adjusting for personal views of marijuana. Finally, the study reported that respondents were so dissatisfied with the regulation of marijuana in Colorado that they went so far as to suggest that marijuana should be criminalized again. Border checks and billboards reinforcing the criminalization of marijuana were suggested as potential solutions to these problems. In the final analysis, it is clear that there are several challenges that should be addressed as states consider legalization.

Adolescent Marijuana Use

A paucity of research has been conducted on how states have been impacted by the legalization of marijuana. In particular, prior research has reported mixed results on adolescent marijuana use after legalization. With the recent move towards the legalization of recreational

marijuana in many states, there is concern about an increased use among adolescents. Some speculate that the relaxation of marijuana laws will lead to expanded use among young people, but there is limited evidence supporting this fear. Moreover, there is a concern that an earlier onset of use would lead to regrettable adulthood consequences as it has been linked to "negative psychosocial outcomes in adulthood, including poorer educational attainment, greater risk of intimate partner violence, lower work commitment, and increased involvement in crime" (Kelly, Berry, Comello & Ray, 2021, p. 63). Azagba, Shan, and Latham (2020) examined patterns of onset marijuana usage among adolescents from 1991 to 2017 using the Youth Risk Behavior Survey. The results showed that the average age of first marijuana use occurred earlier in life from 1991 to 1999; however, the prevalence of participants who used before the age of 15 has declined since. Given that early marijuana exposure is associated with a variety of negative effects, the decreased prevalence of marijuana usage before the age of 15 years is good news for those worried about the health of adolescents.

Several other studies have evaluated adolescent marijuana use after the legalization of recreational marijuana. In order to determine if there were any changes in adolescent use after the legalization of recreational marijuana, Cerdá et al. (2017) explored data from "Monitoring the Future, a national, annual, cross-sectional survey of high school students in the contiguous United States" (p. 1). This study compared past-month marijuana use for Washington and Colorado before and after the legalization of recreational marijuana. Comparisons were also made to non-legalized states. The study reported that "among eighth and 10th graders in Washington, perceived harmfulness of marijuana use decreased and marijuana use increased following legalization of recreational marijuana use" (Cerdá et al., 2017, p. 2). On the other hand, Colorado showed little difference in reported harmfulness or past-month adolescent usage

after legalization. A conservative interpretation of the results suggests that states that legalize recreational marijuana should adopt evidence-based youth substance use diversion services.

Brooks-Russell et al.'s (2019) reported similar conclusions. In this study, data from the Healthy Kids Colorado Survey, a biennial survey administered to students in middle school and high school in odd years, was employed. Colorado allowed for the retail sale of marijuana beginning in January 2014. Data was analyzed before retail sales of marijuana began (fall 2013) and after (fall 2015). The researchers examined marijuana usage over time as determined by lifelong use, past 30-day use, repeated use, and use on school grounds. Demographic features, school characteristics, school district urbanicity, and whether or not the city or county approved retail marijuana stores were also controlled. After analyzing the available data, researchers "did not find an indication of change in past 30-day marijuana use from 2013 to 2015, or for any demographic group" (Brooks-Russell et al., 2019, p. 189). There was also a substantial reduction in the perceived harmfulness of marijuana use, as well as a decrease in the use of other substances. While this study did not find a substantial impact on underage use in Colorado, continued surveillance is needed.

Over the past few years, the legalization of recreational marijuana in several states has gained momentum that has raised fears over the potential increase in marijuana usage among adolescents. In order to address concerns, there must be an establishment of clear regulations in legalized states in order to contain or diminish adolescent use. Due to the scarcity of evidence-based marijuana research, best practice strategies designed for regulating adolescent use of alcohol and tobacco can provide guidance. One method for restricting access to marijuana focuses price controls. By levying taxes on marijuana products, states may be able to limit the onset of adolescent consumption as well as fund potential prevention programs. Another control

measure includes zoning restrictions that keep marijuana businesses away from certain public spaces, such as schools. Training could also help vendors identify fake identification. Educational materials about safe storage should also be disseminated in order to limit access to adolescents. Regarding the packaging and promotion of marijuana, there should be regulations that reduces the appeal of marijuana to youth. Kelly et al (2021, p. 68) found that "for younger demographics, cannabis edibles, extract flavors, and flavored vaping products hold special appeal". State laws should also ban ads promoting marijuana as covered in "Section 843 of the Controlled Substances Act, which states that advertising of any Schedule I drug is prohibited, and any violation of this act is a felony" (Kees, Fitzgerald, Dorsey & Hill, 2020, p. 84). Finally, marijuana packaging should clearly state that use is not intended for anyone under the age of 21. Although prevention science has not devoted much attention to research on adolescent marijuana use, this research "is critical to addressing future challenges and can enable the public health sector to anticipate how the patterns of use may change and what factors influence the change, so as to implement programs and policies to mitigate adverse consequences" (Johnson & Guttmannova, 2019, p. 5). By following some regulatory practices for other types of substances, such as alcohol and tobacco, states will be able to formulate their own guidelines to help prevent marijuana usage among adolescents.

Finally, according to the Substance Abuse and Mental Health Services Administration (2021), among all of the illegal substances found in the United States, marijuana is the most commonly used, with increased usage over the years. Perceptions of marijuana harmfulness has declined over the years, as many do not see marijuana as unsafe (Carliner, Brown, Sarvet & Hasin, 2017). Although marijuana does not pose detrimental health risks to adults, there is some concern about the health risks it poses to adolescents. Research on marijuana usage has found

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that it can affect brain wellbeing, mental health, and athletic performance, as well as lead to impaired driving, developmental problems for fetuses, and its daily use can impact an individuals' performance in certain life tasks (Kelly et al., 2021). It has also been found that "one in six people who start using the drug before the age of 18 can become addicted" (SAMHSA, 2021, p. 1). This is a troubling statistic considering that the addictive effect in adults is much less (one in ten). Marijuana use is on the rise, and due to this, it is important to understand that "over the past few decades, the amount of THC in marijuana has steadily climbed; today's marijuana has three times the concentration of THC compared to 25 years ago" (SAMHSA, 2021, p. 1). With a higher quantity of THC, marijuana has the potential to be more addictive and cause greater effects on the brain. Young adults (18-25 years old) also have the highest rates of usage, and adolescents are increasingly seeing marijuana usage as harmless. As such, it is important to determine whether legalization has increased adolescent use as compared to states that continue to outlaw recreational marijuana.

Purpose

The legalization of recreational marijuana in some states has raised fears about expanded accessibility to young people. The aim of this current study is to compare differences in adolescent drug usage between states that have and have not legalized recreational marijuana.

The Impact of Marijuana Legalization

This research is being conducted to examine differences, if any, in the prevalence of adolescent marijuana use in states that have or have not legalized recreational marijuana. More specifically, national survey data will be employed to conduct a pre/post investigation of adolescent marijuana use after recreational marijuana has been legalized. This will be compared to data on adolescents from states that have not legalized recreational

marijuana. Additionally, an analysis will be undertaken to determine if there has been an increase in experimentation of other drugs, e.g., cocaine, after legalization. This is in an attempt to analyze the gateway argument, which states that using marijuana encourages people to pursue other drugs since they like the effects of marijuana, and are more likely to want to see how other drugs affect them. Supporters of this argument fear that if marijuana becomes more widely available as a result of legalization, it might lead to an increase in the use of other, more potentially dangerous drugs, or lead to addiction (SAMHSA, 2021). All data used for this current study are based on the results of the Youth Risk Behavior Survey (YRBS) developed by the Centers for Disease Control and Prevention (CDC).

The following testable research questions will be the focus of this investigation: (1) Are there any differences in the prevalence of pot use among adolescents between states that have or have not legalized recreational marijuana? (2) Does the prevalence of adolescent pot use increase after recreational marijuana has been legalized? (3) Does the legalization of recreational marijuana increase the prevalence of adolescent experimentation with other controlled substances, such as cocaine?

Method

The Centers for Disease Control and Prevention developed the Youth Risk Behavioral Surveillance System (YRBSS) in 1990 to "monitor health behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States" (Centers for Disease Control and Prevention, 2020, p. 1). YRBSS includes a national school-based Youth Risk Behavior Survey (YRBS). These nationwide school-based surveys are used to track certain detrimental behaviors in adolescents.

These surveys are administered to high school students (9th–12th grade) in both public

and private schools, and feature questions measuring six types of high-risk activities, including those that lead to unintended accidents and violence, risky sexual behaviors, tobacco consumption, alcohol and other drug use, and unhealthy diet/physical activity habits. Individual states are in charge of carrying out the survey. The surveys are distributed randomly to schools around the state and are designed to generate representative samples of private and public-school students in every jurisdiction. The Youth Risk Behavior Survey (YRBS) utilized a two-stage, cluster sampling design for 2009, 2011, and 2015, while a three-stage cluster sampling design was used for the 2013, 2017, and 2019 sweeps. Schools "are selected with probability proportional to the size of student enrollment in grades 9-12 and then required classes of students (e.g., English classes) or a specific period of the school day (e.g., 2nd period) are randomly selected to participate" (Centers for Disease Control and Prevention, 2020, p.1). Students are not required to take the survey as participation is completely voluntary and anonymous. Data is also weighted in order to adjust for nonresponse and varied demographics. This process also makes sure that data is representative of all high school students that were sampled in each jurisdiction.

YRBS surveys are administered every odd number year, and are typically collected in the spring. For this study, all available states and the District of Columbia were analyzed. (Minnesota, Oregon, and Washington, however, do not participate in the YRBS program). Information from all available states that were analyzed for this current investigation can be found in the Appendix. For this study, YRBS data from 2009-2019 were employed. Since 2012 was the year where recreational marijuana was first legalized by any state, it was decided that 2009 YRBS would be collected to allow two survey sweeps (2009 & 2011) to be averaged, if possible, to gauge the prevalence of adolescent marijuana or cocaine use prior to

legalization. The last data point, 2019, is the most current YRBS data available.

Measures

Each state was carefully coded to categorize current recreational marijuana legalization

status (0=Not Legal, 1=Legal), and the year recreational marijuana was legalized. The dependent

variables employed are the total (average) percent of adolescent respondents who reported ever

using marijuana or cocaine. Two versions of the outcome variables were constructed. The first

measures used prevalence data immediately before and after recreational marijuana was

legalized. For instance, if a state legalized recreational marijuana in 2016 then 2015 YRBS data

were used as the "before legalization" measure and the 2017 YRBS data were used as the "after

legalization" measure. Given the possibility of random fluctuations in drug use over time, it was

decided that a measure that averages two YRBS sweeps be constructed. In the same example

used above, a state that legalized recreational marijuana in 2016 would have two previous YRBS

sweeps, 2013 and 2015 in this case, averaged; 2017 and 2019 data were averaged to represent

the prevalence of marijuana/cocaine use after legalization. In the event that two sweeps were not

available, a single data point was used. A more detailed explanation of the analytical plan is

discussed in the next section.

Data Analysis

Research Question 1: Are there any differences in the prevalence of pot use among adolescents
between states that have or have not legalized recreational marijuana?

Recreational marijuana legalization has occurred at different times between 2012-2021,

this is why the District of Columbia and states that legalized before 2019 (n = 11) and those that

have either not legalized or were legalized after 2019 (n = 40) were compared. In order to

analyze these differences, the data were broken down by legalized by 2018 (yes/no). These were

the grouping variables. Filters were used to exclude states that had not legalized or had not

legalized by 2018. Because of the lack of data for lifetime marijuana usage, the earliest

legalization data included states that had legalized by 2018 (n = 11, Washington, Colorado,

Alaska, District of Columbia, Oregon, Maine, California, Massachusetts, Nevada, Vermont, and

Michigan) and compared these with all other states that had not legalized by 2018 or had not yet

legalized recreational marijuana (n = 40). The prevalence of lifetime marijuana use for 2019 was

used as the test variable. An Independent-Samples T Test was employed to compare the mean

prevalence of lifetime marijuana use for 2019 in order to determine if differences in adolescent

marijuana usage between states that have and have not legalized are statistically significant.

Research Question 2: Does the prevalence of adolescent pot use increase after recreational
marijuana has been legalized?

Table 1. Before and After Legalization Comparisons (Single Sweep)

Year Legalized	State	YRBS Sweeps					
		2009	2011	2013	2015	2017	2019
2012	CO, WA		N/A	N/A			
2015	AK			(Before Legalization)		(After Legalization)	
2016	CA, MA, ME				(Before Legalization)	(After Legalization)	
2017	NV				(Before Legalization)		(After Legalization)
2018	MI					(Before Legalization)	(After Legalization)

(yellow)	Before Legalization
(green)	After Legalization

A variable measuring the mean prevalence of pot use immediately before and

after recreational marijuana was legalized was created. States that had legalized recreational

marijuana up until 2018 were analyzed since the most current YRBS report is 2019. For

each state, the mean pot use for the year immediately before and after legalization

occurred were employed. There were some limitations since the years chosen for before and after

data were dependent upon the year that recreational marijuana was legalized. Therefore, some cases had before and after data collected two years before and after legalization. For example, Alaska legalized recreational marijuana in 2015, therefore mean marijuana use data from 2013 and 2017 were utilized (see Table 1 above).

A variable that measured average mean pot use before and after recreational marijuana was legalized was also created to account for random fluctuations. If data was available, the average mean pot use for two YRBS sweeps were computed before and after legalization. For instance, since Alaska legalized recreational marijuana in 2015, the mean average was calculated for the previous two YRBS sweeps (2011 and 2013) to gauge the average prevalence of marijuana use prior to legalization; YRBS sweeps for 2017 and 2019 were computed to measure the average prevalence of marijuana use after legalization (see Table 2 below). When complete data was not available, single sweep data were employed to avoid case attrition. Finally, a Paired - Samples T Test was employed to compare mean differences in pot use before and after legalization.

Table 2. Before and After Legalization Comparisons (2 Sweeps)

		YRBS Sweeps					
Year Legalized	State	2009	2011	2013	2015	2017	2019
2012	CO, WA	N/A	N/A	N/A	N/A		
2015	AK						
2016	CA, MA, ME						
2017	NV						
2018	MI						

	Before Legalization
	After Legalization

Research Question 3: Does the legalization of recreational marijuana increase the prevalence of adolescent experimentation with other controlled substances, such as cocaine?

The process employed to investigate the second research question was duplicated for this investigation using cocaine use data. Tables 3 and 4 below provide a detailed listing of states, including the District of Columbia, that were eligible for analysis as well as YRBS sweeps that were examined for this investigation.

Table 3. Before and After Legalization Cocaine Use Comparisons (Single Sweep)

Year Legalized	State	YRBS Sweeps					
		2009	2011	2013	2015	2017	2019
2012	CO, WA		N/A	N/A			
2015	AK, D.C.			(Before)		(After)	
2016	MA				(Before)	(After)	
2017	NV				(Before)		(After)
2018	MI, VT					(Before)	(After)

(yellow)	Before Legalization
(green)	After Legalization

Table 4. Before and After Legalization Cocaine Use Comparisons (2 Sweeps)

Year Legalized	State	YRBS Sweeps					
		2009	2011	2013	2015	2017	2019
2012	CO, WA	N/A	N/A	N/A	N/A		
2015	AK, D.C.		(Before)	(Before)		(After)	(After)
2016	MA			(Before)	(Before)	(After)	(After)
2017	NV			(Before)	(Before)		(After)
2018	MI, VT				(Before)	(Before)	(After)

(yellow)	Before Legalization
(green)	After Legalization

Results

Research Question 1: Are there any differences in the prevalence of pot use among adolescents between states that have or have not legalized recreational marijuana?

Table 5. 2019 Prevalence of lifetime pot use by legalization status as of 2018 (n=36)

2019 Prevalence of lifetime pot use	Legalized by 2018	N	Mean	Standard Deviation	Standard Error Mean
	No	29	32.63	4.38	.81
	Yes	7	36.46	3.56	1.34

Data for 36 states were available for this analysis. The findings suggest that states that had legalized recreational marijuana by 2018 had a higher prevalence of adolescent marijuana use (36.4%) as compared to prohibition states (32.6%). The observed differences are also statistically significant (t(34) = -2.43, p = .04).

Research Question 2: Does the prevalence of adolescent pot use increase after recreational marijuana has been legalized?

Table 6 below presents the average prevalence of marijuana use immediately prior to and after legalization. Among the six states available for analysis, five experienced a decrease in the prevalence of adolescents who indicated having ever used marijuana after legalization.

Table 6. Mean marijuana use immediately before and after recreational marijuana legalization (n=6)

Year Legalized	State	Before Legalization	After Legalization	Difference	Pot Use Increase
2015	Alaska	38.99	41.55	+2.56	Yes
2016	California	38.58	37.69	-.89	No
2016	Maine	34.65	32.19	-2.46	No
2016	Massachusetts	40.93	37.89	-3.04	No
2017	Nevada	40.88	37.33	-3.55	No
2018	Michigan	41.39	37.53	-3.86	No

The mean difference in the prevalence of adolescent marijuana usage before and after the legalization of recreational marijuana is -1.93%. In other words, states that legalized recreational

marijuana experienced a decrease in marijuana use by approximately 2%. This difference, however, is not a statistically significant decrease (t(5) = 1.93, p = .111).

Table 7. Paired Samples T Test (n=6)

	Mean	N	Standard Deviation	Standard Error Mean
Mean pot use before legalization of recreational marijuana	39.29	6	2.57	1.04
Mean pot use after legalization of recreational marijuana	37.36	6	2.99	1.22

Table 8 below presents the prevalence of marijuana use prior to and after legalization using (if available) two sweep averages. Among the six states available for analysis, every state experienced a decrease in the prevalence of adolescents who indicated having ever used marijuana after legalization.

Table 8. Averaged mean marijuana use before and after recreational marijuana legalization (n=6)

Year Legalized	State	Before Legalization	After Legalization	Difference	Pot Use Increase
2015	Alaska	40.10	39.47	-0.63	No
2016	California	38.58[a]	33.80	-4.78	No
2016	Maine	34.65[a]	34.01	-0.64	No
2016	Massachusetts	41.11	39.87	-1.24	No
2017	Nevada	41.19	37.33[a]	-3.86	No
2018	Michigan	37.65	37.53[a]	-0.12	No

[a] Single data point

Table 9 below shows the multi-sweep mean difference in the prevalence of adolescent marijuana usage before and after the legalization of recreational marijuana is -2.06%. In other words, states that legalized recreational marijuana experienced a decrease in marijuana use by

approximately 2%. This difference is a statistically significant decrease ($t(5) = 2.62$, $p = .047$).

Table 9. Paired Samples T Test (n=6)

	Mean	N	Standard Deviation	Standard Error Mean
Average mean pot use before legalization of recreational marijuana	39.06	6	2.73	1.11
Average mean pot use after legalization of recreational marijuana	37.00	6	2.60	1.06

Research Question 3: Does the legalization of recreational marijuana increase the prevalence of adolescent experimentation with other controlled substances, such as cocaine?

Table 10 below presents the average prevalence of cocaine use immediately prior to and after legalization. Among the six states available for analysis, five experienced a decrease in the prevalence of adolescents who indicated having ever used cocaine after legalization.

Table 10. Mean cocaine use immediately before and after recreational marijuana legalization (n=6)

Year Legalized	State	Before Legalization	After Legalization	Difference	Coke Use Increase
2015	Alaska	5.77	4.01	-1.76	No
2015	D.C.	6.40	7.40	+1.00	Yes
2016	Massachusetts	4.50	4.09	-0.41	No
2017	Nevada	6.60	5.68	-0.92	No
2018	Michigan	4.62	3.43	-1.19	No
2018	Vermont	4.17	3.74	-0.43	No

The mean difference in the prevalence of adolescent cocaine usage before and after the legalization of recreational marijuana is <1%. In other words, states that legalized recreational marijuana experienced a *decrease* in cocaine use by approximately .5%. This difference, however, is not a statistically significant decrease ($t(34) = 1.17$, $p = .294$).

Table 11. Paired Samples T Test (n=6)

	Mean	N	Standard Deviation	Standard Error Mean
Mean coke use before legalization of recreational marijuana	5.21	6	1.20	.49
Mean coke use after legalization of recreational marijuana	4.72	6	1.52	.62

Table 12 below presents the prevalence of cocaine use prior to and after recreational marijuana was legalized using (if available) two sweep averages. Among the six states available for analysis, all but one jurisdiction (District of Columbia) experienced a decrease in the prevalence of adolescents who indicated having ever used cocaine after legalization.

Table 12. Averaged mean cocaine use before and after recreational marijuana legalization (n=6)

Year Legalized	State	Before Legalization	After Legalization	Difference	Coke Use Increase
2015	Alaska	5.34	3.99	-1.35	No
2015	D.C.	6.40[a]	6.60	+0.20	Yes
2016	Massachusetts	4.12	3.91	-0.21	No
2017	Nevada	7.16	5.68[a]	-1.48	No
2018	Michigan	4.40	3.43[a]	-0.97	No
2018	Vermont	4.51	3.74[a]	-0.77	No

[a] Single data point

The multi-sweep averaged mean difference in the prevalence of adolescent cocaine usage before and after the legalization of recreational marijuana is -0.81% (see Table 13 above). States that legalized recreational marijuana experienced a statistically significant *decrease* in cocaine use by approximately 1% ($t(5) = 3.20$, $p = .024$).

Table 13. Paired Samples T Test (n=6)

	Mean	N	Standard Deviation	Standard Error Mean
Average mean coke use before legalization of recreational marijuana	5.36	6	1.17	.48
Average mean coke use after legalization of recreational marijuana	4.55	6	1.27	.52

Discussion

Regarding the first research question, states that had legalized recreational marijuana reported a higher prevalence of adolescent marijuana use (36.4%) as compared to prohibition states (32.6%). The observed differences are statistically significant.

Regarding the second research question, there was not a significant difference in the prevalence of marijuana use among adolescents after the legalization of recreational marijuana; while no statistically significant findings were generated, five out of six states experienced a decrease in the prevalence of marijuana use after the legalization of recreational marijuana.

Finally, regarding the third research question, there was a significant decrease in the prevalence of cocaine use among adolescents after the legalization of recreational marijuana. This is noteworthy because those opposed to the legalization of marijuana have argued that this policy would lead to an increase in the use of other illegal and more harmful substances. These findings do not support the gateway argument.

Overall, it was found that the prevalence of pot use among adolescents did not increase after recreational marijuana had been legalized. It was also found that the legalization of recreational marijuana did not increase the prevalence of experimentation with other controlled

substances, such as cocaine, among adolescents. There were, however, differences in the prevalence of pot use among adolescents between states that had and had not legalized recreational marijuana. While only a speculation, greater accessibility to marijuana as a result of legalization may explain why these differences exist. Additionally, it seems reasonable to suggest that a greater proportion of adolescents would experiment with marijuana in a state that has a more permissive attitude towards marijuana.

Limitations

There are several noteworthy limitations of this study that warrant discussion. Since the YRBS depends on self-reported confessions of risky behaviors, reporting bias is a concern. However, this concern is minimized since the survey is anonymous. Additionally, there is no evidence to suggest that systemic bias occurs more frequently among respondents from states that have or have not legalized recreational marijuana. As such, the error structures should be similar.

Another limitation of this study relates to statistical power. The likelihood of committing a Type II error, the failure to generate statistically significant findings when they exist, was likely given the small number of cases analyzed. The issue was further exacerbated by missing data that excluded cases (states). In the end, this is an exploratory study and caution should be exercised when generalizing the results.

Conclusion

For years, punitive laws reflected the idea that marijuana was a dangerous drug that the government should strictly prohibit. In recent years, however, the social and political stance against marijuana has softened given the number of states that have decriminalized or legalized marijuana. Even Congress is seriously considering the decriminalization of recreational

marijuana at the federal level. This movement is not something that is unique to the United States. Decriminalization is also occurring in many countries as well. Recreational marijuana is legal in Canada and Uruguay, while Georgia, South Africa, the Netherlands, and Portugal are some of the countries in which marijuana has been decriminalized. Decriminalization has been so successful in Portugal that the "consumption, acquisition, and the possession for personal use of narcotic drugs and psychotropic substances is known in the entire world as one of the most successful policies of its kind" (Cabral, 2017, p. 2). Many countries in South America like Ecuador, Colombia, and Argentina among others allow for the use of medical marijuana. Countries in Europe like Denmark, Finland, and Italy among other also allow for the use of medical marijuana. With all of these changes occurring worldwide, it is critical that more research is conducted on the consequences, both positive and negative, of legalizing recreational marijuana.

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Appendix A: *State Recreational Marijuana Legalization Status*

State	Recreational Marijuana Legal	Year Legalized	Date Legalized
Alabama	No	NAP	NAP
Alaska	Yes	2015	2/24/15
Arizona	Yes	2020	11/30/20
Arkansas	No	NAP	NAP
California	Yes	2016	11/9/16
Colorado	Yes	2012	12/10/12
Connecticut	No	NAP	NAP
Delaware	No	NAP	NAP
District of Columbia	Yes	2015	2/26/15
Florida	No	NAP	NAP
Georgia	No	NAP	NAP
Hawaii	No	NAP	NAP
Idaho	No	NAP	NAP
Illinois	Yes	2020	1/1/20
Indiana	No	NAP	NAP
Iowa	No	NAP	NAP
Kansas	No	NAP	NAP
Kentucky	No	NAP	NAP
Louisiana	No	NAP	NAP
Maine	Yes	2016	11/8/16
Maryland	No	NAP	NAP
Massachusetts	Yes	2016	12/15/16
Michigan	Yes	2018	12/6/18
Minnesota	No	NAP	NAP
Mississippi	No	NAP	NAP
Missouri	No	NAP	NAP
Montana	Yes	2021	1/1/21
Nebraska	No	NAP	NAP
Nevada	Yes	2017	1/1/17
New Hampshire	No	NAP	NAP
New Jersey	Yes	2021	1/1/21
New Mexico	Yes	2021	6/29/21
New York	Yes	2021	3/31/21
North Carolina	No	NAP	NAP
North Dakota	No	NAP	NAP
Ohio	No	NAP	NAP

Oklahoma	No	NAP	NAP
Oregon	Yes	2015	7/1/15
Pennsylvania	No	NAP	NAP
Rhode Island	No	NAP	NAP
South Carolina	No	NAP	NAP
South Dakota	Yes	2021	7/1/21
Tennessee	No	NAP	NAP
Texas	No	NAP	NAP
Utah	No	NAP	NAP
Vermont	Yes	2018	7/1/18
Virginia	Yes	2021	7/1/21
Washington	Yes	2012	12/6/12
West Virginia	No	NAP	NAP
Wisconsin	No	NAP	NAP
Wyoming	No	NAP	NAP